

MARITIME AND PORT AUTHORITY OF SINGAPORE

MARINE CIRCULAR TO SHIPOWNERS
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Applicable to: Shipowners, ship managers, ship operators, masters and officers of Singapore ships.

REVISED CHAPTER V (SAFETY OF NAVIGATION) OF SOLAS 74

The revised Chapter V (Safety of Navigation) of SOLAS 74 was adopted by the IMO Maritime Safety Committee by Resolution MSC.99(73) on 5 December, 2000. It will come into force on 1 July 2002 and is applicable to ships built on or after 1 July 2002 in general unless expressly provided otherwise.

2 Several new provisions have been added to the revised Chapter V. These are:

- (a) Definitions (Reg 2)
- (b) Exemptions and equivalents (Reg 3)
- (c) Principles relating to bridge design, design and arrangement of navigational systems and equipment and
bridge procedures (Reg 15)
- (d) Electromagnetic compatibility (Reg 17)
- (e) Voyage data recorders (Reg 20)
- (f) Records of navigational activities (Reg 28).
- (g) Integrated Bridge System (Reg 19.6).

3 Some changes in the revised Chapter V effectively lower the gross tonnage of ships at which the ships have to comply with the requirements. These are:

- (a) The minimum gross tonnage of a ship at which an echo sounding device is required to be carried
has been brought down from 500 to 300 for cargo ships and to any tonnage for passenger ships.
- (b) The minimum gross tonnage of a ship at which a speed and measuring device is required to be carried has been brought down from 500 to 300 for cargo ships and to any tonnage for passenger ships.
- (c) The minimum gross tonnage of a ship at which two radars are required to be carried has been brought down from 10,000 to 3,000.
- (d) The minimum gross tonnage of a ship at which a rate of turn indicator is required to be carried has been brought down from 100,000 to 50,000.
- (e) The minimum gross tonnage of a ship at which a gyro compass bearing repeater, or other means, to take bearings over an arc of the horizon of 360° has been brought down from 1,600 to 500.

4 Several new shipborne navigational equipment were introduced and are required to be carried. These are:

- (a) a receiver for a global navigation satellite system (GPS) or a terrestrial radio-navigation system suitable for use at all times throughout the intended voyage to establish and update the ship's position by automatic means.
- (b) a sound reception system or other means to enable the officer in charge of the navigational watch to hear sound signals and determine their direction when the ship's bridge is totally enclosed.
- (c) a transmitting heading device, or other means to transmit heading information for input to the radar, electronic plotting aid and automatic identification system (AIS)
- (d) an automatic tracking aid, or other means, to plot automatically the range and bearing of other targets to determine collision risk.
- (e) a second automatic tracking aid, or other means, to plot automatically the range and bearing of other targets to determine collision risk for ships of 3,000 gross tonnage and upwards.
- (f) a heading or track control system, or other means, to automatically control and keep to a heading and/or straight track.
- (g) a speed and distance measuring device, or other means, to indicate speed and distance over the ground in the forward and athwartship direction.
- (h) Voyage data recorders.

5 Ships built before 1 July 2002 are required to be fitted with some of the new navigational equipment. These are:

S/No	Navigation equipment	Deadline for compliance
1	a receiver for a global navigation satellite system or a terrestrial radionavigation system, or other means, suitable for use at all times throughout the intended voyage to establish and update the ship's position by automatic means	First survey* after 1 July 2002. (This requirement replaces the radio direction-finding apparatus)
		<p>(a) Passenger ships: not later than 1 July 2003</p> <p>(b) Tankers: not later than the first survey* for safety equipment on or after 1 July 2003</p> <p>(c) Ships other than (a) and (b) of 50,000 grt and upwards:</p>

2	Automatic Identification System (AIS)	<p>not later than 1 July 2004</p> <p>(d) Ships other than (a) and (b) of 10,000 grt and upwards but less than 50,000 grt:</p> <p>not later than 1 July 2005</p> <p>(e) Ships other than (a) and (b) of 3,000 grt and upwards but less than 10,000 grt:</p> <p>not later than 1 July 2006</p> <p>(f) Ships other than (a) and (b) 300 grt and upwards but less than 3,000 grt:</p> <p>not later than 1 July 2007.</p>
3	Voyage data recorders	<p>(a) Ro-ro passenger ships: first survey* on or after 1 July 2002</p> <p>(b) Passenger ships other than ro-ro passenger ships:</p> <p>not later than 1 July 2004</p>

* First survey includes initial survey of ships under construction, the keels of which are laid before 1 July 2002.

6 Notwithstanding the implementation schedule of AIS carriage requirement as it stands now, a proposal has been submitted to the Maritime Safety Committee to accelerate the implementation schedule of AIS carriage requirements for ships of less than 50,000 grt other than passenger ships and tankers. The accelerated implementation schedule proposed is for all ships of 300 grt and upwards but less than 50,000 grt other than passenger ships and tankers to be fitted with AIS not later than 1 July 2004 or 31 December 2004. The proposal will be considered at the 75th session of the Maritime Safety Committee meeting to be held in London in May 2002 and may be adopted as an amendment to Regulation 19.2.4 of the revised Chapter V at a SOLAS Conference to be held in December 2002.

7 You are advised to study the revised Chapter V in more detail to appreciate and evaluate its implications and effects on your ships and operations when it comes into force on 1 July 2002. A copy of the revised Chapter V (IMO PUBLICATION Sales number: IMO-170E) can be purchased from the International Maritime Organisation, 4 Albert Embankment, London or at our local maritime publications suppliers.

8 Any queries regarding this circular should be directed to Mr. Tan Leong Beng at telephone number 6375 6207.